

## REMARKS/ARGUMENTS

This paper is being provided in response to the November 8, 2004 Office Action for the above-referenced application. In this response, Applicant has added new Claims 201-210 and amended Claims 181, 182, 186, 188, 193, 194, and 198 in order to clarify that which Applicant deems to be the claimed invention. Applicant respectfully submits that the amendments to the claims are all supported by the originally filed application.

In the Office Action, Claims 181-190 and 192-200 are provisionally rejected under the judicially create doctrine of obviousness-type double patenting as being unpatentable over Claims of co-pending application 10/435,926. Applicant respectfully submits that consideration of submission of a terminal disclaimer at this point is premature and will consider submission of a terminal disclaimer to overcome these rejections if they mature into actual rejections over issued claims.

The rejection of Claims 181 and 193 under 35 U.S.C. § 102(b) as being anticipated by Bjork et al. (U.S. Patent No. 5,128,619, hereinafter referred to as “Bjork”) is hereby traversed and reconsideration thereof is respectfully requested. Applicant respectfully submits that Claims 181 and 193, as amended herein, are patentable over the cited reference.

Applicant’s Claim 181, as amended herein, recites a method for detecting an event on a wire comprising: processing a received waveform in accordance with signal propagation modeling in said wire producing a processed waveform; fitting each of a plurality of functions to a portion of data points representing said processed waveform; determining a characteristic for each of said plurality of functions; evaluating said characteristic of each of said plurality of

functions at data points representing said processed waveform; and detecting an event using said characteristic of each of said plurality of functions.

Applicant's Claim 193, as amended herein, recites a computer program product for detecting an event on a wire comprising: executable code that processes a received waveform in accordance with signal propagation modeling in said wire producing a processed waveform; executable code that fits each of a plurality of functions to a portion of data points representing said processed waveform; executable code that determines a characteristic for each of said plurality of functions; executable code that evaluates said characteristic of each of said plurality of functions at data points representing said processed waveform; and executable code that detects an event using said characteristic of each of said plurality of functions.

Bjork relates generally to a system for, and method of, determining cable characteristics, and more specifically to a system for, and method of, determining characteristics of installed cable for digital communications. (Col. 1, Lines 9-12). An incident pulse is transmitted over the communication cable. In response to the incident pulse, a waveform, including any pulses reflected from the cable, is detected. The waveform is digitized into a plurality of time samples. First, second, and third derivatives of each of the time samples are calculated. Each of the time samples are then analyzed to determine whether a significant pulse is included in the waveform. If more than one positive significant pulse or a negative significant pulse is found, the communication cable includes at least one fault which will prevent the operation of the digital communication thereon. (Col. 2, Lines 6-25; Figures 5a and 5b). Bjork discloses a method for determining whether a cable will support digital telephones or communications thereon. The application determines the presence of significant pulses in the waveform in order to determine

the location of the end of the cable, the cable attenuation and the presence of bridge taps. With reference to Bjork's Figure 5a, the flowchart thereof includes step 100 for determining the cable impedance and acquiring the waveform in step 101. The waveform is then processed using an averaging filter in step 102 and the first, second and third derivatives of the time samples are determined in step 104. (Col. 5, Line 67-Col. 6, Line 29; Figure 5a).

Applicant's Claim 181, as amended herein, is neither disclosed nor suggested by Bjork in that Bjork neither discloses nor suggests *a method for detecting an event on a wire comprising: processing a received waveform in accordance with signal propagation modeling in said wire producing a processed waveform; fitting each of a plurality of functions to a portion of data points representing said processed waveform; determining a characteristic for each of said plurality of functions; evaluating said characteristic of each of said plurality of functions at data points representing said processed waveform; and detecting an event using said characteristic of each of said plurality of functions*, as set forth in Claim 181. As pointed out above, the method disclosed in Bjork's Figure 5a includes determining the cable impedance (step 100), acquiring the waveform (step 101), processing the waveform using an averaging filter (step 102), and then determining the first, second and third derivatives of the time samples. Bjork appears silent regarding any disclosure or suggestion of *processing a received waveform in accordance with signal propagation modeling in said wire producing a processed waveform*, as set forth in Applicant's amended Claim 181. Bjork discloses using an averaging filter and makes no disclosure or suggestion of processing any signal based on any type of modeling. Accordingly, Bjork neither discloses nor suggests at least the step of *processing a received waveform in accordance with signal propagation modeling in said wire producing a processed waveform*, as set forth in Applicant's amended Claim 181.

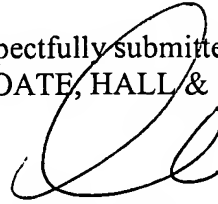
For reasons similar to those set forth regarding Claim 181, Applicant's Claim 193, as amended herein, is neither disclosed nor suggested by Bjork in that Bjork neither discloses nor suggests at least the feature of *a computer program product for detecting an event on a wire comprising: executable code that processes a received waveform in accordance with signal propagation modeling in said wire producing a processed waveform, ...* as set forth in Claim 193.

In view of the foregoing, Applicant respectfully requests that the rejection be reconsidered and withdrawn.

Applicant respectfully submits that Applicant's newly added Claims 201-210 are also patentable over the cited art.

Based on the above, Applicant respectfully requests that the Examiner reconsider and withdraw all outstanding rejections and objections. Favorable consideration and allowance are earnestly solicited. Should there be any questions after reviewing this paper, the Examiner is invited to contact the undersigned at 617-248-4042.

Respectfully submitted,  
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